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DRINKER OR DRUNKARD?*

** * * Warning Signals on the Way to Alcoholism*

ALCOHOLISM STUDY PROJECT

Following the recent legislative appropriation of funds for studies concerning the effectiveness of treatment of alcoholics in California, the State Alcohol Rehabilitation Commission has contracted with the State Department of Public Health to undertake such an evaluative study.

Preliminary explorations as to study design are already underway by a newly formed project staff under the direction of Dr. Wendell Lipscomb and administrationally located in the department's Bureau of Chronic Diseases. It is anticipated that three treatment centers of widely diversified philosophies of alcoholic therapeutics will be utilized for the studies, with the aim of encompassing as broad a spectrum of currently used therapies as possible.

Present plans include the initiation of field studies in August of this year with follow-ups of treated individuals at regular intervals of three months.

The accompanying article has been reprinted from the *World Health Organization Newsletter* because of the department's interest in this subject and its appropriateness in view of the study project just undertaken.

I. How He Begins

The very beginning of the use of alcoholic drinks has always a social motive in the prospective addictive and nonaddictive alcoholic.

In contrast to the average social drinker, however, the prospective alcoholic (together with the occasional symptomatic excessive drinker) soon experiences a rewarding relief through his drinking. The relief is strongly marked in his case because either his tensions are much greater than in other members of his social circle, or he has not learned to handle those tensions as others do.

At first this drinker ascribes his relief to the situation rather than to the drinking and he seeks therefore those situations in which incidental drinking will occur. Sooner or later, of course, he becomes aware of the relationship between relief and drinking.

In the beginning he seeks this relief only occasionally, but in the course of six months to two years his tolerance for tension decreases to such a degree that he takes recourse to alcoholic relief practically daily.

Nevertheless, his drinking does not result in open intoxication, but he reaches towards the evening a stage of release from emotional stress. Even in the absence of intoxication this involves fairly heavy drinking, particularly in comparison to the use of alcoholic beverages by other members of his circle. The drinking is, nevertheless, not conspicuous either to his associates or to himself.

After a certain time the drinker comes to need a somewhat larger amount of alcohol than formerly in order to reach the "soothing" stage.

This type of drinking behavior may last from several months to two years according to circumstances and may be called the prealcoholic phase, which is divided into stages of occasional relief-drinking and constant relief-drinking.

II. The Warning Phase

The sudden onset of a behavior resembling the "blackouts" due to lack of oxygen, marks the beginning of the "warning" phase of alcohol addiction.

The drinker, who may have had not more than 50 to 60 g. of absolute alcohol and who is not showing any signs of intoxication, may carry on a reasonable conversation or may go through quite elaborate activities without a trace of memory the next day, although sometimes one or two minor details may be hazily remembered.

This amnesia, which is not connected with loss of consciousness, has been called the "alcoholic palimpsests," with reference to old Roman manuscripts superimposed over an incompletely erased manuscript.

* Reprinted from the July-August, 1954, issue of the *World Health Organization Newsletter*, an issue devoted entirely to the problem of alcoholism. This article constitutes the Second Report of the Alcoholism Subcommittee of the WHO Expert Committee on Mental Health.

"Alcoholic palimpsests" may occur on rare occasions in an average drinker when he drinks intoxicating amounts in a state of physical or emotional exhaustion. Nonaddictive alcoholics, of course, also may experience "palimpsests," but infrequently and only following rather marked intoxication. Thus, the frequency of these "blackouts" and their occurrence after moderate drinking of alcohol are characteristic of the prospective alcohol addict.

This would suggest heightened susceptibility to alcohol in the prospective addict. Such susceptibility may be psychologically or physiologically determined.

The analogy with "blackouts" caused by oxygen lack is tempting. Of course, an insufficient oxygen supply cannot be assumed, but a wrong utilization of oxygen may be involved. The present status of the knowledge of alcoholism does not permit of more than vague conjectures which, nevertheless, may constitute bases for experimental hypotheses.

The onset of "alcoholic palimpsests" is followed (and in some instances preceded) by the onset of drinking habits which indicate that, for this drinker, beer, wine and spirits have practically ceased to be beverages and have become sources of a drug which he "needs."

Some of these habits imply that this drinker has some vague realization that he drinks differently from others.

Surreptitious drinking is one of them. At social gatherings the drinker seeks occasions for having a few drinks unknown to others, as he fears that if it were known that he drinks more than the others he would be misjudged; those to whom drinking is only a custom or a small pleasure would not understand that, because he is different from them, alcohol is for him a necessity, although he is not a drunkard.

Preoccupation with alcohol is further evidence of this "need." When he prepares to go to a social gathering his first thought is whether there will be enough alcohol for his requirements, and he has several drinks in anticipation of a possible shortage.

Because of this increasing dependence upon alcohol, the onset of avid drinking (gulping of the first or first two drinks) occurs at this time.

As the drinker realizes, at least vaguely, that his drinking is outside of the ordinary, he develops guilt feelings about his drinking behavior and because of this he begins to avoid reference to alcohol in conversation.

These behaviors, together with an increasing frequency of "blackouts," foreshadow the development of alcohol addiction; they are premonitory signs, and this period may be called the warning phase of alcohol addiction. The consumption of alcoholic drinks in this phase is "heavy," but not conspicuous, as it does not lead to marked open intoxications.

The effect is that the prospective addict reaches towards evening a state which may be called emotional anesthesia. Nevertheless, this condition requires drinking well beyond the ordinary usage. The drinking is on a level which may begin to interfere with metabolic and nervous processes as shown by the frequent alcoholic "blackouts."

The "covering-up" which is shown by the drinker in this stage is the first sign that his drinking might separate him from society, although at the outset the drinking may have served as a method of overcoming some lack of social integration.

As, in the "warning" phase, rationalizations of the drinking behavior are not strong and there is some insight as well as fear of possible consequences, it is feasible to intercept incipient alcohol addiction at this stage. In the United States of America, the publicity given to these symptoms begins to bring prospective alcoholics to clinics as well as to groups of Alcoholics Anonymous.

It goes without saying that even at this stage the only possible road for this type of drinker is that of total abstinence.

The "warning" period may last anywhere from six months to four or five years, according to the physical and psychological makeup of the drinker, his family ties, vocational relations, general interests, and so forth.

The phase ends and the crucial or acute phase begins with the onset of loss of control, which is the critical symptom of alcohol addiction.

III. The Crucial Phase

Loss of control means that as soon as any small quantity of alcohol is taken a demand for more alcohol is set up which is felt as a physical demand by the drinker, but could possibly be a conversion phenomenon.

This demand lasts until the drinker is too intoxicated or too sick to take more alcohol. The physical discomfort caused by this drinking behavior is contrary to the object of the drinker, which is merely to feel "different." As a matter of fact, the bout may not even be started by any individual need of the moment, but by a "social drink."

After recovery from the intoxication, it is not the "loss of control"—that is, the physical demand, apparent or real—which leads to a new bout after several days or several weeks; the renewal of drinking is set off by the original psychological conflicts or by a simple social situation which involves drinking.

The "loss of control" is effective after the individual has started drinking, but it does not give rise to the beginning of a new drinking bout. The drinker has lost the ability to control the quantity once he has started but he still can control whether he will drink on any given occasion or not. This is evidenced in the fact that after the onset of "loss of control" the drinker can go through a period of voluntary abstinence ("going on the wagon").

The question of why the drinker returns to drinking after repeated disastrous experiences is often raised.

Although he will not admit it, the alcohol addict believes that he has lost his will power and that he can and must regain it. He is not aware that he has undergone a process which makes it impossible for him to control his alcohol intake.

To "master his will" becomes a matter of the greatest importance to him. When tensions rise, "a drink" is the natural remedy for him and he is convinced that this time it will be one or two drinks only.

Practically simultaneously with the onset of "loss of control" the alcohol addict begins to rationalize his drinking behavior. He produces the well-known alcoholic "alibis."

He finds explanations which convince him that he did not lose control, but that he had a good reason to get intoxicated and that in the absence of such reasons he is able to handle alcohol as well as anybody else.

These rationalizations are needed primarily for himself and only secondarily for his family and associates.

The rationalizations make it possible for him to continue with his drinking, and this is of the greatest importance to him as he knows no alternative for handling his problems.

This is the beginning of an entire "system of rationalizations" which progressively spreads to every aspect of his life. While this system largely originates in inner needs, it also serves to counter social pressures which arise at the time of the "loss of control." At this time, of course, the drinking behavior becomes conspicuous, and the parents, wife, friends, and employer may begin to reprove and warn the drinker.

In spite of all the rationalizations, there is a marked loss of self-esteem, and this demands compensations which, in a certain sense, are also rationalizations. One way of compensation is the grandiose behavior which the addict begins to display at this time. Extravagant expenditures and grandiloquence convince him that he is not as bad as he had thought at times.

The rationalization system gives rise to another system, namely the "system of isolation." The rationalizations quite naturally lead to the idea that the fault lies not within himself but in others, and this results in a progressive withdrawal from the social environment. The first sign of this attitude is a marked aggressive behavior.

Inevitably, this latter behavior generates guilt. While even in the "warning" period remorse about the drinking arose from time to time, now persistent remorse arises, and this added tension is a further source of drinking.

In compliance with social pressures the addict now goes on periods of total abstinence. There is, however, another way of control of drinking which arises out of the rationalizations of the addict.

He believes that his trouble arises from his not drinking the right kind of beverages or not in the right way. He now attempts to control his troubles by changing the pattern of his drinking, by setting up rules about not drinking before a certain hour of the day, in certain places only, and so forth.

The strain of the struggle increases his hostility towards his environment and he begins to drop friends and quit jobs. It goes without saying that some associates drop him and that he loses some jobs, but more often he takes the initiative as an anticipatory defense.

The isolation becomes more pronounced as his entire behavior becomes alcohol-centered; that is, he begins to be concerned about how activities might interfere with his drinking instead of how his drinking may affect his activities. This, of course, involves a more marked egocentric outlook which leads to more rationalizations and more isolation.

There follows a loss of outside interests and a reinterpretation of interpersonal relations coupled with marked self-pity.

The isolation and rationalizations have increased by this time in intensity and find their expression either in contemplated or actual geographic escape.

Under the impact of these events, a change in family habits occurs. The wife and children, who may have had good social activities, may withdraw for fear of embarrassment or, quite contrarily, they may suddenly begin intensive outside activities in order to escape from the home environment. This and other events lead to the onset of unreasonable resentments in the alcohol addict.

The predominance of concern with alcohol induces the addict to protect his supply; that is, to lay in a large stock of alcoholic beverages, hidden in the most unthought-of places. A fear of being deprived of the most necessary substance for his living is expressed in this behavior.

Neglect of proper nutrition aggravates the beginnings of the effects of heavy drinking on the organism, and frequently the first hospitalization for some alcoholic complaint occurs at this time.

One of the frequent organic effects is a decrease of the sexual drive which increases hostility towards the wife and is rationalized into her extramarital sex activities, which gives rise to the well-known alcoholic jealousy.

By this time remorse, resentment, struggle between alcoholic needs and duties, loss of self-esteem, and doubts and false reassurance have so disorganized the addict that he cannot start the day without steadying himself with alcohol immediately after arising or even before getting out of bed. This is the beginning of regular morning drinking which previously had occurred on rare occasions only.

This behavior terminates the crucial phase and foreshadows the beginnings of the chronic phase.

During the crucial phase intoxication is the rule, but it is limited to the evening hours. For the most part of this phase, drinking begins sometime in the afternoon and by the evening intoxication is reached.

It should be noted that the "physical demand" involved in the "loss of control" results in continual rather than continuous drinking. Particularly the "morning drink," which occurs towards the end of the crucial phase, shows the continual pattern. The first drink at rising, let us say at 7 a.m., is followed by another drink at 10 or 11 a.m., and another drink around 1 p.m., while the more intensive drinking hardly starts before 5 p.m.

Throughout, the crucial phase presents a great struggle of the addict against the complete loss of social footing. Occasionally the after-effects of the evening's intoxication cause some loss of time, but generally the addict succeeds in looking after his job, although he neglects his family. He makes a particularly strong effort to avoid intoxication during the day.

Progressively, however, his social motivations weaken more and more, and the "morning drink" jeopardizes his efforts of complying with his vocational duties as this effort involves a conscious resistance against the apparent or real "physical demand" for alcohol.

The onset of the "loss of control" is the beginning of the "disease process" of alcohol addiction which is superimposed over the excessive symptomatic drinking. Progressively, this disease process undermines the morale and the physical resistance of the addict.

IV. The Chronic Phase

The increasingly dominating role of alcohol, and the struggle against the "demand" set up by morning drinking, at last break down the resistance of the addict and he finds himself for the first time drunk in the

daytime and on a weekday and continues in that state for several days until he is entirely incapacitated. This is the onset of prolonged intoxications referred to in the vernacular as "benders."

This latter drinking behaviour meets with such unanimous social rejection that it involves a grave social risk. Only an originally psychopathic personality or a person who has later in life undergone a psychopathological process would expose himself to that risk.

These long-drawn-out bouts commonly bring about marked ethical deterioration and impairment of thinking which, however, is not irreversible.

True alcoholic psychoses may occur at this time, but in not more than 10 percent of all alcoholics.

The loss of morale is so heightened that the addict drinks with persons far below his social level in preference to his usual associates — perhaps as an opportunity to appear superior — and, if nothing else is available, he will take recourse to "technical products" such as bay rum or rubbing alcohol.

A loss of alcohol tolerance is commonly noted at this time. Half of the previously required amount of alcohol may be sufficient to bring about a stuporous state.

Indefinable fears and tremors become persistent. Sporadically these symptoms occur also during the crucial phase, but in the chronic phase they are present as soon as alcohol disappears from the organism. In consequence the addict "controls" the symptoms through alcohol. The same is true of psychomotor inhibition, the inability to initiate a simple mechanical act — such as winding a watch — in the absence of alcohol.

The need to control these symptoms of drinking exceeds the need of relieving the original underlying symptoms of the personality conflict, and the drinking takes on an obsessive character.

In many addicts, about 60 percent, some vague religious desires develop as the rationalizations become weaker. Finally, in the course of the frequently prolonged intoxications, the rationalizations become so frequently and so mercilessly tested against reality that the entire rationalization system fails and the addict admits defeat. He now becomes spontaneously accessible to treatment. Nevertheless, his obsessive drinking continues as he does not see a way out.

Formerly it was thought that the addict must reach this stage of utter defeat in order to be treated successfully. Clinical experience has shown, however, that this "defeat" can be induced long before it would occur of itself and that even incipient alcoholism can be intercepted.

As the latter can be easily recognized it is possible to tackle the problem from the preventive angle.

Reduction of Tooth Decay in Rio Vista Results From Fluoridation

Comparative data are now available for measuring the reduction of dental decay in children of Rio Vista (Solano County) during the three years since fluoridation of the water supply was begun.

In October of 1951 the City of Rio Vista was the first California community to begin fluoridating its water supply. Beginning that year, and every year since then, the Division of Dental Health of the State Department of Public Health has made a dental survey of the Rio Vista school children. The results of the 1954 survey have now been compiled, and a comparison with 1951 data shows the effectiveness of fluoridation in reducing dental decay.

Comparing children of the ages six to nine (the group of school age which would derive the most benefit in the three-year period of fluoridation) it was found that the number of decayed, filled and missing teeth was reduced from 2.1 per child in 1951 to 1.5 per child for the same age group in 1954. This represents a decrease of 29 percent. In the same three-year period the 9 to 12 age group had a reduction of 22 percent, dropping from 5.9 decayed, missing and filled teeth per child to 4.6. The benefits from fluoridation can also be seen from the fact that in 1951 only 26 percent of the children from six to nine had teeth which had never been affected with decay, while in 1954 this had risen to 42 percent.

In the surveys done in Rio Vista, all children were examined, regardless of how long they had lived in the city. Consequently, some of the children examined in 1954 have not lived there for the last three years and have not derived the full benefits from fluoridation. From the experience of other communities, it is anticipated that surveys in the future will reveal that those who have lived all of their lives in the area, drinking fluoridated water, will have approximately 65 percent less dental decay than was found there in the 1951 survey before fluoridation was begun.

At Grand Rapids, Michigan, after eight years of fluoridation the six-year age group shows 70.8 percent reduction in tooth decay, the seven-year group, 52.5 percent, and the eight-year group, 49.2 percent. A totally unexpected benefit in Grand Rapids has been a 25.0 percent reduction in the 16-year age group, who were eight years old when fluoridation was begun.

At Newburgh, New York, where fluoridation has been in progress for seven years, the reduction is similar to that in Grand Rapids: 69.4 percent for the six-year age group, 67.8 for the seven-year group, 40.4 for the eight-year-olds, and 51.4 for the nine-year age group.

Evanston, Illinois, after four years of fluoridation, shows a reduction of 73.6 percent in the six-year group, 56.4 in the seven-year group, and 35.4 in the eight-year group.

(The source of these comparative figures is the Committee on Dental Health of the Food and Nutrition Board, National Research Council — National Academy of Sciences.)

Department Contracts With University for Library Services

As of the latter part of April, 1955, the library services of the State Department of Public Health merged with those of the School of Public Health of the University of California. This was coincidental with the occupation of the new buildings of the department and the School of Public Health, which are in close proximity in Berkeley.

Hereafter, the State Department of Public Health will receive library services from the University. The department contracts with the University for these services.

"Coming together is a beginning; keeping together is progress; working together is success."—*Henry Ford*

Broadened Hospital Construction Program Made Possible by Legislation

The State Advisory Hospital Council met in Berkeley May 19-20 to consider policies of the Hospital Survey and Construction Program for the fiscal year which begins July 1, 1955. The meeting was especially well attended as over a thousand notices had been sent by the Bureau of Hospitals, State Department of Public Health, to hospitals and health agencies throughout the State inviting participation in the public hearing and deliberations of the council and the department.

Interest was unusually high as the May meeting was to consider not only policies relating to the regular program, which has been in operation since 1946, but also the initial plans for an expanded program if the current session of the Legislature passed the necessary enabling legislation.

Assembly Bill No. 146 was before the Legislature at the time of the council meeting and has since passed both Senate and Assembly. Assembly Bill No. 146 enables California to participate in the broadened hospital program authorized by Congress in 1954 by passage of the Medical Facilities Survey and Construction Act, known as the Wolverton Act.

Under this act, states may receive federal assistance funds for construction of chronic disease hospitals, nursing homes, diagnostic and treatment centers, and rehabilitation centers, in addition to the acute hospitals, tuberculosis hospitals, mental hospitals, and public health centers previously included in the program.

This federal act amended the Hospital Survey and Construction Act of 1946, known as the Hill-Burton Act, under which federal funds became available to the states for hospital survey and construction. California instituted its present hospital survey and construction program at that time. California law gave the administrative responsibility to the State Department of Public Health, acting with the advice of the Hospital Advisory Council, whose members are appointed by the Governor.

Assembly Bill No. 146 was before the Legislature on an emergency basis, as federal funds available under the Wolverton Act for the Fiscal Year 1954-55 will revert to the Federal Government unless these funds can be under construction contract by June 30, 1956. In order to be under contract by that time, fund allocation must be made as soon as possible to provide time to applicants for local fund raising, plan preparation and other necessary steps in developing their projects.

The next meeting of the Department and the Hospital Advisory Council will be held in Los Angeles August 3d and 4th. Allocation of funds will be made at that time under the regular program for the Fiscal Year 1955-56, and of the funds available for the broadened program under the Wolverton Act for the Fiscal Year 1954-55.

In addition to broadening the California program, Assembly Bill No. 146 authorizes the allocation of state funds to nonprofit hospital projects. This constitutes a change of policy, as prior to enactment of Assembly Bill No. 146, allocation of state funds had been limited to projects sponsored by governmental units, including counties, hospital districts, and cities.

Butte County Survey Completed—Report Submitted to Supervisors

A review of the programs and policies of the Butte County Health Department has recently been completed. This review was requested by the Butte County Board of Supervisors and was accomplished by staff of the State Department of Public Health together with a local committee appointed by the board. This committee was composed of representatives of local interested groups, such as the Butte-Glenn Medical Society, the Butte County Citizens' Committee for Public Health, the Butte County Taxpayers Association, etc.

Over a period of six months, 12 meetings were held with this committee for detailed discussion of the programs and activities of the County Health Department. Following these discussions, a report was drafted by the committee. Included in the report were recommendations on policy, program, and personnel needs as agreed to by the committee and concurred in by the State Department of Public Health. This report was submitted to the board of supervisors on May 16th.

374,932 California School Children Get First Polio Vaccine Inoculation

A total of 374,932 first- and second-grade school children in California have received their first inoculation in the National Foundation for Infantile Paralysis vaccination program. That number represents 75.3 percent of the total number of children eligible to participate in the NFIP program. In addition, 131,801 children had received their second inoculation as of June 15th.

The organized immunization program was canceled in some areas of the State because of the indefiniteness of the vaccine supply needed to complete the second inoculation before the close of school. This made it possible to increase greatly the number of children receiving second shots before school is out by reallocating the vaccine supply from abandoned programs to other areas.

During the week ending June 10th there were 38 reported cases of polio in the State, one more than reported during the comparable week a year ago. So far this year there have been 429 reported cases of the disease. For the same period last year, there were 628 reported polio cases.

Quality Improvement Program Begun for Dried Fruit Industry

A quality improvement program to assure the delivery of uniformly clean dried fruit to the packing industry was instituted in May by the department's Bureau of Food and Drug Inspections. The orchard-to-packer program, which has been established in cooperation with other governmental agencies, the dried fruit industry, and the California Farm Bureau, is directed toward recognition of desirable minimum levels of sanitation for dried fruit production.

While the department has previously carried responsibility for the enforcement of sanitation practices in the packing of dried fruit, a recent Attorney General's opinion enlarges the scope of this responsibility to include the dried fruit farming industry too. While dried fruit producers in general have been meeting public health standards, it was felt that a

basic sanitation program should be established in order to assure a uniformly good quality of fruit throughout the entire process.

As an initial step in the new program, the Bureau of Food and Drug Inspections has mailed 18,500 letters to all dried fruit producers and processors in the State. The mailing included a statement stressing the importance of maintaining minimum standards of sanitation and two educational leaflets on dried fruit sanitation, one developed by the department and the other by the University of California Agricultural Extension Service.

The department's program will include instruction in fruit handling methods, pest and insect control, and proper care and maintenance of equipment. The department will assist the producers in meeting the program sanitation and quality levels by field visits and meetings, explaining improved methods of dried fruit preparation, sanitary handling and storage procedures.

Parathion Found on Strawberries Offered for Sale in Bay Area

The recent finding of parathion in amounts exceeding one part per million on fresh strawberries, offered for sale in Oakland and San Francisco, required action by the department's Bureau of Food and Drug Inspections. Preliminary tests revealed residues of two to four parts per million. Two lots were quarantined and subsequently destroyed.

Meanwhile, a joint investigation with the agricultural commissioner of Santa Clara County and with the State Department of Agriculture was initiated to determine whether the recommended method of parathion application and the waiting of 21 days between application and picking of the strawberries had been observed.

There is reason to believe that the "spooning" or hand method of applying parathion as a pesticide is not permitting its complete hydrolyzation during the recommended 21 days.

In view of the importance of the subject, investigation will be continued and efforts will be made to correct any unsatisfactory practices of the strawberry growers.

Cancer Quack Exhibit Helps Detect Napa "Pathoclast" Operator

The showing of the department's cancer quack exhibit at the Napa County Fair in the fall of 1954 led to the recent apprehension of an operator of quack devices in Napa by the department's Bureau of Food and Drug Inspections.

At the fair, where the exhibit was sponsored by the Napa County Health Department, the Napa County Medical Society, and the Napa Branch of the American Cancer Society, a number of spectators remarked to the food and drug inspectors manning the exhibit that a local chiropractor was using a device similar to one of those shown.

Not long afterward this chiropractor mailed several hundred cards informing Napa residents that a diagnostic clinic would be conducted at his office where examinations would be made and treatments given for certain diseases, including sinus infection, high and low blood pressure, and cardiac conditions. A similar advertisement was placed in the Napa telephone directory. The department's Bureau of Food and Drug Inspections then began an investigation.

A bureau inspector, acting as a patient, made an appointment with the chiropractor. During his visit he complained of severe headaches. The chiropractor turned various knobs and dials on an elaborate device, called a "Pathoclast," and pronounced his ailments to be caused by a subnormal condition of the liver. The same device was then used to treat the inspector. This was done by having him hold a bakelite rod attached to the "Pathoclast."

When these facts were presented to the Napa County District Attorney a complaint was issued charging violations of those sections of the Health and Safety Code and the Business and Professions Code having to do with false advertising and operating a clinic without a license. A search warrant was also obtained.

A special investigator from the State Board of Chiropractic Examiners and a representative of the department's Division of Laboratories joined inspectors of the Bureau of Food and Drug Inspections in the investigation.

The chiropractor was arrested, five "Pathoclast" devices and patient records were seized. Bail was set at $500.

At the trial in the Justice Court of Napa, the defendant pleaded guilty to all charges, was fined $100, and the devices ordered forfeited.

Investigation of the "Oscilloclast," Results in Indictments

The "parent" of many of the quack electronic devices now current is the "Oscilloclast" devised by the late Dr. Abrams many years ago. After being repeatedly suppressed, "Oscilloclast" operators start again at intervals. Recently six of these machines were seized in Los Angeles and a local chiropractor arrested. The investigation was made by cooperation of the State Board of Medical Examiners, the Los Angeles Police Department, and the Bureau of Food and Drug Inspections of the State Department of Public Health.

The chiropractor was arrested for violating sections of the law which prohibit advertising a device as having effect on certain diseases listed in the law, and for using "Dr." before his name without indicating that he is a chiropractor. His accomplice was arrested in Orange County shortly afterward. The accomplice performed the diagnosis for the chiropractor by means of the "Radioscope," another device also well known to investigators. The chiropractor sent a drop of the patient's blood on a piece of blotting paper to the woman in Orange County, who diagnosed the condition by placing it in the "Radioscope." She then sent a written diagnosis to the chiropractor with an anatomical chart showing the electrode placement for treatment with the "Oscilloclast."

This woman was arrested for violating the Business and Professions Code, since she is not licensed to practice any of the healing arts in California.

Grand jury indictments have been returned against both of these people, and the cases will soon come to trial.

"The greatest joy in life is to accomplish. It is the getting, not the having. It is the giving, not the keeping."—*Dr. Frederick Grant Banting,* developer of insulin.

Public Health Positions

Fresno County

Public Health Educator: Salary $381-$476. Training and experience equivalent to completion of approved graduate course in public health education and administration. Applicant with experience preferred, not required. Contact Robert D. Monlux, M.D., Health Officer, Fresno County Health Department, 515 South Cedar, Fresno.

Humboldt-Del Norte County

Public Health Nurses: Openings for staff positions. Salary $332-$415. California Public Health Nursing Certificate required. Generalized county program. Car provided.

Sanitarian: Salary $332-$415. Applicants must possess certificate of registration as a sanitarian in California. Car furnished.

For information about the Humboldt-Del Norte positions write John A. Carswell, M.D., Health Officer, Humboldt-Del Norte County Department of Public Health, Box 875, Eureka.

Monterey County

Public Health Nurses: Three positions are vacant—two on the Monterey Peninsula. Salary range, $325-$401. Registration in California and current California public health nursing certificate required. Must own car. Mileage allowed. Write Myron W. Husband, M.D., Director of Public Health, Monterey County Department of Public Health, 154 West Alisal Street, Salinas.

Oakland

Assistant Bacteriologist: Salary $340-$390. Immediate opening. California State certificate as a Public Health Bacteriologist is required. Write Personnel Department, City Hall, Oakland.

Orange County

Public Health Bacteriologist: Salary, $337-$417. Immediate opening. Possession of a valid Public Health Bacteriologist certificate issued by the State Department of Public Health and a valid Milk Bacteriologist certificate issued by the State Department of Agriculture required. Selection will be made on the basis of a personal interview. Apply Orange County Personnel Department, 644 North Broadway, Santa Ana.

Solano County

Sanitarian: Salary, $309-$385. Must possess certificate as a Registered Sanitarian. Mileage allowed. Write H. G. Mello, M.D., Health Officer, Solano County Health Department, 228 Broadway, Vallejo.

Sonoma County

Sanitarian: Salary, $311-$374. Must possess certificate as a Registered Sanitarian. Car furnished. Write Robert S. Westphal, M.D., Health Officer, Sonoma County Health Department, 3325 Chanate Road, Santa Rosa.

Medical Social Work Education Project Expected to Increase Enrollment

Twenty candidates are seeking to enroll next term in the medical social work curriculum of the University of California School of Social Welfare. Since only six were enrolled for medical social work last year, it is felt that the increase is the result of the Medical Social Work Education Project instituted in 1954 by the Medical Social Service of the State Department of Public Health and the University's Schools of Public Health and Social Welfare.

Late in 1954 the U. S. Children's Bureau approved a joint application of the department and the university for federal funds to aid in the training of much-needed social workers specifically for service in public health. The Medical Social Education Project set up with these funds is unique in the United States in that it provides for a third year of graduate education with matriculation both at the university's School of Social Welfare and School of Public Health, with field work in local health departments.

Stipends were made available to social workers from other states as well as California, for second and third year study under this plan and were publicized throughout the Country. The Medical Social Work Education Project has completed its first year.

According to figures compiled by the Bureau of the Census, the urban and rural populations of the United States are now increasing at approximately the same rate. In contrast, during the 1940's the urban population increased by 20 percent, and the rural population by 8 percent.

Accidents took approximately 91,500 lives in the United States during 1954, about 3,500 fewer than in 1953. More than half of the decrease was accounted for by a reduction in deaths from motor vehicle accidents. There were 36,500 motor vehicle accidents in 1954, 2,000 fewer than in 1953.—*Statistical Bulletin, Metropolitan Life Insurance Co., December, 1954.*

Early Penicillin Treatment Prevents Most Attacks of Rheumatic Fever

Penicillin prophylaxis of recurrent rheumatic fever has been actively supported and sponsored this year by the State and National Heart Associations.

While rheumatic fever deaths have long been declining in numbers, mortality continues to be significant. During 1953 in the United States some 1,500 children and young people under 25 years of age died of rheumatic fever and rheumatic heart disease; over 19,000 others over 25 also died from these causes.

Rheumatic fever is a recurrent disease which in most instances can be prevented. Since both the initial and recurrent attacks of the disease are precipitated by infections with beta hemolytic streptococci, prevention of rheumatic fever and rheumatic heart disease depends upon the control of streptococcal infections. This may be accomplished by: (1) early and adequate treatment of streptococcal infections in all individuals; and (2) prevention of streptococcal infections in rheumatic subjects. Adequate and early penicillin treatment will eliminate streptococci from the throat and therefore prevent most attacks of rheumatic fever.

The California Heart Association, in cooperation with the National Heart Association, is conducting an educational program for physicians and allied professions. In addition, the Association's Penicillin Prophylaxis Committee is seeking means through which the economically "borderline" group of patients can purchase penicillin at reduced cost through their own physician. Patients who are financially solvent will, of course, purchase their own penicillin on prescription.

For those patients in the low income bracket, who are receiving care under the Crippled Children Services program, the department's Bureau of Crippled Children Services is making oral penicillin available upon recommendation of the attending physician. This phase of the department's participation in the preventive program is carried out through the Crippled Children Services programs of local health departments.

Adulterated Peanut Oil Quarantined

An example of close cooperation between state and federal agencies occurred during May in a matter involving a shipment to Nevada from California of vegetable oil which was labeled "peanut oil" but was adulterated with cottonseed oil.

The matter was called to the attention of the U. S. Food and Drug Administration and referred for investigation to the Bureau of Food and Drug Inspections of the California State Department of Public Health. Investigation established that the "peanut oil" in question had been packed by an Oakland oil works which had obtained its raw material from an oil refinery in Louisiana.

The investigation substantiated the fact that the "peanut oil," which had been distributed and that which was still on the premises, did, in fact, contain cottonseed oil — a less expensive oil.

It was revealed that the adulteration took place at the refinery in Louisiana by reason of improper cleaning of the filling lines. A total of approximately 5,500 gallons was quarantined and will be probably diverted for vegetable shortening manufacture.

Review of Reported Communicable Diseases Morbidity by Month of Report—May, 1955

Diseases With Incidence Exceeding the Five-year Median

Diseases	*May 1955*	*May 1954*	*May 1953*	*Five-year Median*
Amebiasis	49	44	46	44
Chickenpox	5,677	6,149	5,330	5,550
Food poisoning	150	236	43	43
German measles	1,922	1,230	3,506	1,230
Hepatitis, infectious	114	224	80	51
Measles	15,371	12,038	12,787	12,038
Pertussis	515	381	222	381
Poliomyelitis, total	139	138	112	91
Poliomyelitis, paralytic	76	87	51	66
Rabies, animal	13	5	12	12
Salmonella infections	102	58	44	44

Diseases Below the Five-year Median

Diseases	*May 1955*	*May 1954*	*May 1953*	*Five-year Median*
Brucellosis	2	7	6	6
Coccidioidomycosis (disseminated)	5	5	9	7
Diphtheria	2	--	1	17
Encephalitis, infectious (type undetermined)	6	11	8	11
Influenza	79	108	27	80
Mumps	22	23	45	26
Pertussis	4,391	4,428	5,098	4,428
Shigella infections	39	43	93	43
Streptococcal, infectious respiratory, including scarlet fever	775	882	836	836
Typhoid fever	3	6	8	8

Venereal Diseases

Diseases	*May 1955*	*May 1954*	*May 1953*	*Five-year Median*
Syphilis	463	530	562	562
Gonococcal infections	1,083	1,282	1,152	1,282
Chancroid	11	13	14	--[1]
Granuloma inguinale	--	--	1	--[1]
Lymphogranuloma venereum	3	2	9	—[1]

[1] Median not calculated.

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